

# **SYSTEM AND METHOD FOR RAPID PREHEATING OF AN AUTOMOTIVE FUEL CELL**

## **Abstract of Disclosure**

A system 10 for selectively and rapidly preheating one or more vehicle fuel cells 12 during cold start or freezing conditions. The system 10 includes a bypass valve 26, a controller 30, vehicle sensors 32 and a bypass conduit 54. The controller 30 monitors vehicle attribute data by use of sensors 32 to determine whether a cold start condition exists. Based upon the attribute data, controller 30 may signal valve 26 to bypass heat exchanger 18, and cause compressed air to be delivered directly to fuel cells 12, thereby heating the fuel cells 12.

## Figures